



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,846	08/02/2000	James D. Thompson	030206.0179.CON1	8327

20306 7590 03/05/2004

MCDONNELL BOEHNEN HULBERT & BERGHOFF  
300 SOUTH WACKER DRIVE  
SUITE 3200  
CHICAGO, IL 60606

EXAMINER

LACOURCIERE, KAREN A

ART UNIT

PAPER NUMBER

1635

24

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/630,846

Applicant(s)

THOMPSON, JAMES D.

Examiner

Karen A. Lacourciere

Art Unit

1635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on interview conducted 01-28-04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 and 19 is/are allowed.
- 6) ☒ Claim(s) 1-3,9-12,20-22,24 and 25 is/are rejected.
- 7) ☒ Claim(s) 4-8,13-17 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date 28 January 2004.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1635

### **DETAILED ACTION**

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

In response to Applicant's arguments, the rejection of record of claims 1, 2, 9-19, 24 and 25, under 35 USC 102(e) as anticipated by Noonberg et al. is hereby withdrawn. A further search, however, produced a new reference and a new rejection under 35 USC 102(b) is set forth herein.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 9-12, 20-22, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellington et al.

Ellington et al. disclose transcribed RNA aptamer sequences, wherein a desired RNA portion (an aptamer sequence that binds to Reactive Blue 4, for example) is located between a 5' region and a 3' region and wherein the 3' region and the 5' region form an intramolecular stem with each other (see for example the RNA illustrated in figure 4. As defined in the specification, "desired RNA" includes any foreign molecule which is useful from a therapeutic or

Art Unit: 1635

diagnostic or other viewpoint (p 8 of the specification) and includes decoy oligonucleotides, which are defined as an RNA molecule that mimics the natural binding domain for a ligand. In the case of Ellington et al., the B4-25 aptamer illustrated in figure 4 mimics the binding domain for Reactive Blue 4. The aptamer RNA of Ellington et al. includes an intramolecular stem between the 3' and 5' region which comprises at least 15 base pairs (for example, the binding sequence includes bold residues and the paired regions 3' and 5' to the binding sequence have at least 15 base pairs). The stem of the aptamer sequence disclosed by Ellington et al. is separated from the desired RNA by spacer sequence, wherein the spacer sequence is within the range of 5-50 nucleobases. Ellington et al. disclose making their RNA aptamer sequence by transcribing the RNA using a T& polymerase system, however, regardless of the transcription method used to produce the aptamer, the resultant aptamer would have the same physical properties and, therefore, the aptamer disclosed by Ellington anticipates each of the claims directed to RNA molecules transcribed by various methods.

Therefore, Ellington et al. anticipates claims 1-3, 9-12, 20-22, 24 and 25.

### ***Claim Objections***

Claims 4-8, 13-17, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1635

***Allowable Subject Matter***

Claims 18 and 19 are allowed.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen A. Lacourciere whose telephone number is (571) 272-0759. The examiner can normally be reached on Monday-Thursday 6:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John L. LeGuyader can be reached on (571) 272-0760. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karen A. Lacourciere  
February 24, 2004

  
KAREN A. LACOURCIERE, PH.D  
PRIMARY EXAMINER